

### Datasheet for ABIN7551112

# PUS10 Protein (AA 1-529) (His tag)



### Overview

Quantity:	1 mg
Target:	PUS10
Protein Characteristics:	AA 1-529
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PUS10 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details	
Purpose:	Custom-made recombinat PUS10 Protein expressed in mammalien cells.
Sequence:	MFPLTEENKH VAQLLLNTGT CPRCIFRFCG VDFHAPYKLP YKELLNELQK FLETEKDELI
	LEVMNPPPKK IRLQELEDSI DNLSQNGEGR ISVSHVGSTA SKNSNLNVCN VCLGILQEFC
	EKDFIKKVCQ KVEASGFEFT SLVFSVSFPP QLSVREHAAW LLVKQEMGKQ SLSLGRDDIV
	QLKEAYKWIT HPLFSEELGV PIDGKSLFEV SVVFAHPETV EDCHFLAAIC PDCFKPAKNK
	QSVFTRMAVM KALNKIKEED FLKQFPCPPN SPKAVCAVLE IECAHGAVFV AGRYNKYSRN
	LPQTPWIIDG ERKLESSVEE LISDHLLAVF KAESFNFSSS GREDVDVRTL GNGRPFAIEL
	VNPHRVHFTS QEIKELQQKI NNSSNKIQVR DLQLVTREAI GHMKEGEEEK TKTYSALIWT
	NKAIQKKDIE FLNDIKDLKI DQKTPLRVLH RRPLAVRARV IHFMETQYVD EHHFRLHLKT
	QAGTYIKEFV HGDFGRTKPN IGSLMNVTAD ILELDVESVD VDWPPALDD Sequence without tag.
	The proposed Purification-Tag is based on experiences with the expression system, a
	different complexity of the protein could make another tag necessary. In case you have a

## special request, please contact us. Characteristics: Key Benefits: Made to order protein - from design to production - by highly experienced protein experts. Protein expressed in mammalien cells and purified in one-step affinity chromatography · The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified. > 90 % as determined by Bis-Tris Page, Western Blot Purity: Grade: custom-made **Target Details** PUS10 Target: PUS10 (PUS10 Products) Alternative Name: Background: TRNA pseudouridine synthase Pus10 (Hup10) (EC 5.4.99.25) (Coiled-coil domain-containing protein 139) (tRNA pseudouridine 55 synthase) (Psi55 synthase) (tRNA pseudouridylate synthase) (tRNA-uridine isomerase), FUNCTION: Protein with different functions depending on its subcellular location: involved in miRNA processing in the nucleus and acts as a tRNA pseudouridylate synthase in the cytoplasm (PubMed:31819270, PubMed:33023933). In the cytoplasm, acts as a pseudouridylate synthase by catalyzing synthesis of pseudouridine (54) and pseudouridine(55) from uracil-54 and uracil-55, respectively, in the psi GC loop of a subset of tRNAs (PubMed:30530625, PubMed:31819270, PubMed:33023933). tRNA pseudouridylate

synthase activity is enhanced by the presence of 1-methyladenosine at position 53-61 of tRNAs

(PubMed:30530625). Does not show tRNA pseudouridylate synthase activity in the nucleus (PubMed:33023933). In the nucleus, promotes primary microRNAs (pri-miRNAs) processing

independently of its RNA pseudouridylate synthase activity (PubMed:31819270). Binds pri-

#### **Target Details**

miRNAs (PubMed:31819270). Modulator of TRAIL/TNFSF10-induced cell death via activation of procaspase-8 and BID cleavage (PubMed:14527409, PubMed:19712588). Required for the progression of the apoptotic signal through intrinsic mitochondrial cell death (PubMed:19712588). {ECO:0000269|PubMed:34527409, ECO:0000269|PubMed:30530625, ECO:0000269|PubMed:31819270, ECO:0000269|PubMed:33023933}.

Molecular Weight:

60.2 kDa

UniProt:

Q3MIT2

### **Application Details**

Application Notes:

In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions:

For Research Use only

### Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months